THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXVII. THURSDAY, OCTOBER 16, 1862. NO. 11.

TRANSMISSION OF SYPHILIS FROM THE FATHER TO THE FŒTUS, AND FROM THE FŒTUS TO THE MOTHER.

[Translated from the *Gazette des Hopitaux*.]

CAN the seminal fluid of a man communicate the germ of syphilis to the product of conception? Can a fœtus, thus infected, in its turn impart this disease to the mother during gestation? These are questions which Dr. Beyran has been led to propose from the observation of a case which he has had the kindness to communicate, and which we will shortly relate. But first we will let our friend himself lay down the terms of the problem he proposes to elucidate.

To resolve this problem, he says, it does not seem to me necessary to take into account the well-known influence which the father has, in the organization of the product of conception. This influence is as great as it is unequivocal, and every day, so to speak, some new fact adds its weight to strengthen this opinion; so that we might say that every germ contains or is capable of containing the principle of most of the peculiarities of its parents, anterior to its development, and that it is the summing up and the essence of them. In fact, in life do we not see on every side a thousand proofs of the homogeneity and consubstantiality which unite son or daughter to the father? Such as the similarity of features, the peculiar resemblances, the temperament, idiosyncrasy, liability to certain diseases, to say nothing of the moral correspondence, which I set aside, although it equally belongs to the domain of medicine. In a word, all the facts observed up to the present time amply suffice to demonstrate the possibility of the transmission of the individual peculiarities and morbid tendencies of the father to his offspring, and syphilis does not seem to escape this law of hereditary morbid tendency. For the rest the following case demonstrates, first, the infecting power of the father upon the fœtus; secondly, that of the fœtus on the mother while she was entirely free from syphilitic contagion. The following is the case.

Madam N——, aged twenty-nine years, of a somewhat lymphatic

temperament, without any previous syphilitic disease, born of healthy parents, without any hereditary rheumatic tendency, was affected in 1859, three months after marriage, with acute articular rheumatism, from which she recovered at the end of five weeks. During the summer of the same year she became *enceinte*, and was confined early in 1860, with a healthy child, not exhibiting a trace of syphilis.

It was not so with the second child, as we shall see. But before proceeding with the history of the second confinement, we must refer to the antecedents of the husband before 1859.

A chronic discharge from the urethra or *military drop;* no trace of syphilis; old or recent hypertrophy of the liver, for which M. N. had been under the care of Messrs. Trousseau and Beyran. For the stricture this gentleman had consulted, at first M. Leroy, then Messrs. Segalas and Beyran. He was cured of his urethral discharge.

Early in 1860, M. N—— contracted a chancre at the base of the gland. It became indurated, and was accompanied by an indolent enlargement of a number of glands of the left groin. Being absent from home, the patient could not put himself under the charge of M. Beyran until three months later, when there only remained the scar of the chancre. There still existed in the left groin considerable enlargement of the glands.

On examining the throat there was found an erythematous redness uniformly spread over the velum palati and the throat, with mucous papules on the tonsils, with secondary glandular swellings in the neck. The patient was subjected to specific treatment by the proto-ioduret of mercury.

After two months of this treatment the syphilitic symptoms had disappeared, and the patient's general condition seemed considerably better. During the interval the patient had returned to his marital relations, in spite of the remonstrances of his physician. Everything, however, appeared to be going on without any special indication of danger, and the lady, pregnant for the second time, was in good health in all respects. At the full term of pregnancy she was confined. But this second child presented at birth about the nates and the genitals an erythematous eruption as well as papules or mucous patches about the anus, umbilicus, and on the neck and head. At this time, the mother, most carefully examined, showed nothing suspicious about the genital organs or elsewhere. Two months and a half after her confinement, syphilitic symptoms appeared, without any new infection, in the form of impetigo of the scalp, accompanied by excessive tenderness of this region, and general pains of a neuralgic character, aggravated at night. To these preliminary symptoms succeeded soon an exanthematous eruption with which the chest and belly were covered, coming on without fever or itching. At the same time the patient complained of a stiffness of the calves of the legs, which made, at times, walking very painful.

A mixed treatment, composed of the proto-ioduret of mercury,

iodide of potassium and alkaline baths, continued for six months, resulted in the recovery of the patient.

M. Beyran draws the following conclusions from this case, which we submit for the judgment of our readers.

In this case what do we see? In the first, place a perfectly healthy woman, whose husband up to this time was entirely free from all taint of syphilis, has a child which is perfectly healthy. The same state of things does not exist during the second pregnancy. This time the husband, being infected with constitutional syphilis, communicates this disease to the product of conception, which in turn transmits it to the mother. The transmission effected in this way is evident, when we take into consideration the time at which the syphilitic symptoms appeared, and the circumstances attending their development. In addition, the absence of all specific lesion of the sexual organs of the patient at the time of the birth of the child, and the characteristic signs presented by the husband, leave no room for doubt on this point. From all these circumstances it may be concluded that the spermatic fluid of the husband infected or transmitted the germ of syphilis to the fœtus at the time of conception, and that the fœtus communicated the disease to the mother during the period of gestation.

ON THE EMPLOYMENT OF MERCURY AND IODIDE OF POTASSIUM IN THE TREATMENT OF SYPHILIS.

By Dr. Junien-Lavillauroy. Translated from the *Gazette des Hopitaux*.

HAVING sketched in a bold style the history of the treatment of syphilis by mercury, having pointed out at what period of the disease, and against what symptoms, mercurials may be useful, M. Junien-Lavillauroy sums up in his thesis the principal modes of the administration of mercury, and insists specially on the method of Montpellier, or that of radical cure. This first part ends with a table of the principal mercurial compounds, arranged in the order of their activity.

We know that M. Bouchardat divides the principal compounds of mercury into;—1st. The *soluble preparations.* Iodhydrargyrate of the iodide of potassium; bi-chloride (corrosive sublimate); and cyanide of mercury.

2d. *Insoluble preparations.* The red oxide; the proto-chloride; proto-iodide; and metallic mercury.

This arrangement is admitted by all therapeutists, particularly by M. Trousseau.

The second part of this work is devoted to iodide of potassium. The opinions advanced by the author are summed up in the following conclusions:—

1. If, with the generality of physicians, we adopt the method of radical cure, or that of Montpellier, in the treatment of constitu-

tional syphilis, the practice which consists in giving the iodide of potassium after the disappearance of the symptoms under mercurial treatment, is always useless and may often become injurious.

II. The mixed treatment is very energetic, and ought to be employed in the case of very obstinate and inveterate syphilis; but with the condition, that, if we wish for a durable cure, the mixed treatment must be continued a long time, or that after it the ordinary mercurial treatment should be continued for a certain period.

III. We understand the prompt and immediate treatment on the part of those physicians who do not believe in the preventive action of what they term anti-syphilitics; but from the moment that they give them to anticipate new symptoms, according to the rules of the method of Montpellier (and, it must be remarked, all those who give the iodide of potassium after mercury, do it for this end), all these do the opposite to what they propose to do. They drive, in fact, the mercury from the economy, the specific which they have designedly accumulated in it, and to which they are proposing to add, perhaps injuriously, another specific, the iodide of potassium.

IV. The action of the iodide of potassium on the compounds of mercury fixed in the economy explains the opinion that iodide of potassium does not act as an anti-syphilitic in tertiary syphilis, except in those persons who have previously undergone a mercurial treatment.

V. The iodide of potassium may act not so much as iodide of potassium, as in transforming the mercury in the system into a more active compound, the iodhydrargyrate of iodide of potassium. So that it would seem there is in reality but one specific for syphilis, *mercury*.

VI. When in syphilitic patients symptoms appear a long time after mercurial treatment (and with much greater reason when it has not been employed at all), as we may suppose that there is no mercury left in the system, if we wish to treat the patient by iodide of potassium, in order to count upon its action, it is well to give at the same time a mercurial preparation; that is to say, to follow what Vidal de Cassis calls the mixed treatment.

A CASE FROM AN OLD COMMON-PLACE BOOK.

[Communicated for the Boston Medical and Surgical Journal.]

JULY, 1807.—Mr. A. B., 22 years, having for a long time been troubled with indigestion and the consequences therefrom, was attacked, after a short journey, with violent pain in the intestines, with an impossibility of voiding any fæces, also attended with a slight diabetes. Dr. —— attended, and ordered, in the first place (Sunday evening), to have the abdomen fomented. Soon after, a large blister was applied below the umbilical region, and at the same time were ordered 60 drops of laudanum every 15 minutes, until the

patient was relieved, which was after the fourth dose. After the first dose of laudanum, 10 grs. of calomel were exhibited, alternating with 1½ spoonfuls of castor oil. The oil, after the fourth or fifth dose, occasioning nausea, a dose of senna and manna was given. Began the exhibition of calomel Sunday evening at 9 o'clock, and continued until the patient had taken four doses of the first and five of the last—about seven spoonfuls; the senna and manna were given. Sunday night there was a considerable sweat. Monday morning, some more flies were rubbed on the plaster, though it had raised three blisters.

Monday, between 1 and 2, another dose of senna and manna was administered. There being some diabetes (dysuria), gum arabic was given. The physic began to operate about 1 on Monday; a large worm was evacuated; there were about nine discharges by Tuesday morning. Wednesday, the patient complaining of pain in the abdomen, gave him 6 grs. of calomel with rhubarb, and ordered, if the pain did not subside, to apply another blister. The pain, however, did subside. Friday, senna and manna were again administered. Saturday, much better, and Sunday, rode to his home, from C. to B., about three miles.

Remarks.—The writer had been a medical student three months when the above case occurred—the first in his Common-Place Book—having entered Dr. ——'s office, April 17th, 1807. This fact in the writer's professional preparation may explain certain technical awkwardnesses in the composition, and occasional obscurities in the use of professional terms. His Master in Medicine was in large and successful practice. He had got what home could afford towards professional education, and then went abroad to complete what had been well begun. It was not then the every-day affair to go abroad that it is now. And crossing the Atlantic was, as the Salmagundi has it, thought a marvellous sharpener of the wits. Our case shows what was medical practice in 1807. Physic then was physic; and he who did not give it, would have had but very few to take it. Mr. A. B., 22 years old, was attacked with severe illness, and a successful battle was carried on against it. It began of a Sunday evening, and ended the following Saturday. On Sunday he drove three miles, and as we hear nothing more of him, it is safe to infer that he had a good recovery, or delivery from disease. It is pretty clear there was very little NATURE in this disease, or case, whatever may be the power of that mysterious agency now-a-days. It was blisters, and calomel, and castor oil, and senna and manna, and especially laudanum, which achieved the victory. Disease—to speak metaphorically, as the time warrants—was a rebel, an intruder within the territory of health, and an armed resistance against such a foe was thought a most imperative duty, and the duty was faithfully done. And was not the victory glorious? Men, medical ones, I mean with certain aids from the female army, now undertake to ridicule what they call HEROIC medicine! "A cock to Esculapius!"

We had then no fear of physic, and less of disease. But *tempora mutantur, et nos mutamur in illis.* Stomachs and bowels have changed, and so has physic. "Am that calomel?" asks the five-year-old. "If it was, I won't take it, so!" And what a change in the apothecary's business! He sells cigars, and the people smoke them! And recipes, how changed! I give a specimen of one of the olden time: R. Hyd. sub-mur., pulv. jalap., do. aloes, aa ʒ i.; Muc. acaciæ gum, q. s.; M. ft. pil. No. 480. Dose 4, p. r. n. This is not a joke. It is a true record. I live pretty nigh to one who put up many such recipes. A fashionable pill of that time was called 10 and 10—*rel* ten grains of calomel and as much jalap, with an occasional accomplice of tart. emet. 1 gr.

Now there was nothing excessive in the operation of such doses. They surely worked themselves out and off, and the taker only remembered how much good they did him. Patients then were grateful, for they were satisfied and gratified with treatment and results. A doctor spoke with authority. The calling was honored.

CASES IN MILITARY SURGERY.

[Communicated for the Boston Medical and Surgical Journal.]

Aneurism of the Axillary Artery.—By the kindness of Dr. R. H. Longwell, one of the Surgeons of the Union Hospital, Georgetown, I have been permitted to extract from his note-book the following interesting case:—

John Illingworth was wounded on the 30th of August, at the battle of Bull Run, the ball entering at the lower border of the pectoralis major just above the axillary space, and making its exit at the outer border of the scapula, two inches above the lower angle of that bone, severing in its course the median nerve, and so completely destroying the axillary artery as to render the pulse imperceptible at the wrist. The only point at which pulsation could be detected was about four inches below the wound. A slight aneurism formed at the seat of injury, which continues to the present time (Sept. 26th). The patient entered the hospital on the 3d of September, at which time the wound presented little evidence of inflammation. Five days after his entrance, the wound began to suppurate freely at the point of exit, and four or five days from that time suppurated slightly at the point of entrance. At no time was there a high degree of inflammation, the patient being restricted to a farinaceous diet. On the day after his arrival a compress was applied over the subclavian artery, and simple cold water dressing has been made use of since. On the sixth day, the pulse was very slightly perceptible at the wrist, and continues so, but apparently to no greater degree than on the fifth day after the injury was received. The arm lost its temperature, but by the application of carded wool and stimulating lotions, has been kept comfortably

warm. There is some, but not a great deal, of atrophy of the injured arm. The patient's general health is at present good, and his prospects are flattering.

Gunshot Wound of the Neck, severing the Cervical Plexus of Nerves.—Dr. H. S. Hannen, of the Presbyterian Church Hospital, Georgetown, D. C., had charge of this case, and furnishes the following particulars:—

Patrick Norton, Co. D, 1st Regiment Sickle's Brigade, entered the hospital on the evening of September 1st, having been wounded at the battle of Bull Run, a few days previously. The patient was somewhat exhausted at the time of his entrance, but rallied under the use of stimulants. Respiration was easy. During the night, the patient was extremely restless, continually calling for water, and wishing to have his position changed. This continued until death. The pulse was full and bounding. Upon examination, the next day, a small wound, apparently from a pistol shot, was found in the neck near the right primitive carotid, the ball making its exit near the inferior border of the scapula on the left side. There was paralysis of the upper and lower extremities, consequent upon the severing of some of the nerves involved in the wound. There was also paralysis of the sphincters of the bladder and rectum, the fæces and urine being voided involuntarily. Great irritability of the stomach was a constant symptom, it being impossible for the patient to retain food or medicine for more than fifteen minutes. Involuntary emissions of semen occurred nearly every two hours. The patient finally became so noisy and troublesome, that it was necessary to have him isolated. The treatment consisted of cold water dressings to the wound, and anodynes, the patient taking, on an average, eight drachms of solution of sulphate of morphia (one grain to the ounce) daily. He continued in pretty much this condition till September 16th, when he began to sink, and expired on the 20th, at 6, P.M. A *post-mortem* examination could not be obtained.

IS ALCOHOL FOOD?

Read at the Annual Meeting of the British Medical Association, August 8th, 1862, by Thomas Inman, M.D. (Lon.), Physician to the Liverpool Royal Infirmary.

THE author first devoted a few words to definition, stating that by "alcohol" he intended to comprise those liquors in common use which owed their effects to alcohol: and by "food," anything which supplied material by which the body was nourished. He then adverted to the fact that a saccharine material was found in the blood of all mammals when it entered the lungs, and to the strong probability that a fermentative process took place in those organs, with the extrication of carbonic acid, the actual source of which in the blood had not yet been absolutely ascertained. The close atomic

composition of starch and sugar and alcohol *plus* carbonic acid was pointed out; also the fact that the starches, &c., and alcohol were often tolerated by delicate stomachs when other ingredients were not tolerated.

The author then shortly summarized the effects of ordinary food, whether animal or vegetable, when taken with water for a beverage and in proper quantity, and compared these with the results following a temperate draught of ale or porter; showing that there was no real distinction between the one and the other, except that the liquid sooner entered the circulation and sooner left it. It was no argument against the use of beef that a man who had dined on it one day wanted a dinner the day after; nor against beer, that a person who had taken one glass was ready for another in a few hours. The prejudicial effects of excessive eating were adverted to, and after mentioning a few instances where guzzling had proved fatal, others were alluded to in which a prolonged lethargy or an apoplectic condition had been induced. The use of beef tea sometimes produced convulsions in infants, but this result did not vitiate the dietetic value of meat. The physical condition of excessive eaters was then spoken of, and it was shown that some were thin, others stout; and that as regarded the moral condition of those who, from choice, religious belief, or necessity, abstained from the use of alcoholic beverages, they were to the full as bad as those who indulged in drink. Cannibals were teetotallers, and neither Nana nor Tippoo was a drunkard. On inquiring into the habits of total abstainers and those who drank ale, wine, &c., the author had ascertained that the former habitually ate much more than the latter; and one of three deductions was necessary: either the former ate too much, the latter too little, or the drink of the one was equivalent to a portion of the food of the other. To ascertain which of these alternatives was nearest the truth, Dr. Inman had experimented in his own person, and had made numerous observations through the assistance of friends. The conclusion he came to was that which had been previously insisted on by Mr. Lewes and others—namely, that alcohol replaced a certain amount of food; and "as things which are equal to the same are equal to one another," he inferred that if a glass of ale was equal to a slice of mutton in its satisfying effect, and that mutton was food, it must follow that ale is food. To say that persons could not live on ale, was of no value as an argument; for no one could live on biscuit alone, though bread was called the staff of life. To ascertain how far it was possible for any one to live on alcohol alone, he had for many years been seeking information respecting drunkards, and he mentioned two—one on the authority of the individual herself (a surgeon's widow), and the other on the authority of the medical attendant, where patients had subsisted for a prolonged period on brandy-and-water alone. He mentioned others on the authority of other medical friends, and two which he had himself been conversant with. He combated

the idea of the probability of imposture, inasmuch as in all these cases solid food was loathed excessively, and was generally rejected by the stomach. He then mentioned some cases of children that he had attended, in whom the appetite had failed entirely, where food which was administered by force had been vomited, yet in these alcohol in one form or other gave the support which other food did not, and gradually restored the appetite to its normal state. He noticed, too, that infants at the breast, when ill, would digest brandy-and-water when they would reject all else. The advantageous influence of this fluid was apparent, even if it were administered in enemata.

A definite course of induction, irrespective of chemical theory, having ended in the conclusion that alcoholic drinks were strictly alimentary, he shortly referred to the statements which were relied upon to demonstrate the contrary. If alcohol, he said, passed out of the system unchanged, so did water; yet water was absolutely necessary to life. But there was no proof that all the alcohol imbibed in a long symposium ever left the body. He inferred that if it did pass out of the lungs in vapor as largely as was assumed, a party of spirit drinkers would make the atmosphere of a closed room explosive; and he recalled the statement of Pereira, that some northern race had found that two or three people in succession might keep up intoxication with "lolium temulentum" by drinking the urine of the first eater; yet none had discovered that the urinal of a drunkard contained anything equal to gin. But certain foods, as oatmeal, bran, potatoes, oats, &c., were not wholly retained in the system, yet they were alimentary.

Dr. Inman then combated the idea that alcohol was a mere stimulant, by contrasting it with turpentine, cantharides, ginger, cayenne, iodide of potassium, and other drugs, which were stimulants to every part of the body to which they were applied. He argued that alcohol could not simply be a conservator of tissue; for a glass of ale after a long walk would induce plentiful perspiration, and a glass of whiskey or gin-and-water acted with most people as a powerful diuretic. Nor could we conclude that it assisted in disintegrating the tissues; for if it did, the use of ale, wine or spirit must then be antagonistic or antidotal to food, and the winebibber must necessarily require more food than the teetotaller, whose tissues were not disintegrated by artificial means.

He then summed up his conclusions thus:—

1. Nature has provided in the salivary glands, the liver and the lungs of every mammal an apparatus for converting all food, especially farinaceous, into alcohol; and we have no evidence that such conversion does not take place.

2. One form of alcohol or another is available for the support of life, and for restoration to health when no ordinary food can be or is digested.

3. Alcohol, after being taken, is incorporated with the blood,

passes into the various tissues, and ultimately disappears, a small portion only passing away in the breath. We can say no more of bread, potatoes, or oatmeal porridge, a small portion of each of which passes out of the body with the fæces.

4. Alcohol, in the form of ale, porter, wine, &c., relieves hunger and quenches thirst simultaneously, and with a completeness that is not equalled by water, infusion of gentian, cayenne pepper, or by turpentine—i. e., it does not act as water simply, or as a stimulant alone.

5. Wine, beer, &c., satisfy the appetite when taken alone, and act for the time as any solid food would do.

6. When alcohol is mingled with other food, a less amount of the latter suffices for the wants of the system than if water had been used as the drink.

7. The various forms in which alcohol is taken have as marked and specific effects as have animal and vegetable articles of diet.

8. Individuals have subsisted wholly upon one or the other of the various forms of alcohol in common use for periods of great length; and as it is illogical to conclude that they must have lived on air, without food, or on flies like chameleons, the conclusion is irresistible.

What that conclusion is, it might be left for every thinking man to decide.—*London Lancet.*

Army Medical Intelligence.

The following statement of the sanitary condition of the 16th Regiment Massachusetts Volunteers, may not be uninteresting to our readers.

Camp near Fort North, Va.
September 30, 1862.

In response to Circular No. 9, Art. 3, I have the honor to forward the following summary of the medical history of the *Sixteenth Massachusetts Regiment* from the time of its formation. During the month of July, 1861, the 16th Massachusetts Volunteers went into camp at Camp Cameron, Mass.; six companies reporting on July 2d, and the remainder following at intervals till the regiment was complete in the number of its officers and enlisted men. The regiment was mustered into the service of the United States the 5th of August ensuing. It remained in this camp till August 17th, living in barracks and enjoying good health. August 19th went into camp at Camp McClellan, Baltimore, Md., where it remained until August 29, 1861, when it embarked for Fortress Monroe. Sept. 1st, went into camp at Camp Hamilton, Va., where it was stationed until May 8, 1862.

This camp was bounded on the south by Hampton Roads, and lay about the former residence of Hon. Joseph Segar. It was free from *malaria*, had an abundance of good water, and was well policed. The picket duties, however, carried the men into miasmatic tracts of land, lying within a circuit of two miles of the camp. An abundance of good food and clothing was at all times furnished the regiment during

this period. The companies accumulated funds, the men had comfortable winter quarters, and had erected a large gymnasium for exercise, and a bakery for regimental cooking. The Segar house was used for a hospital. The medical supplies were ample. During this time there was great immunity from severe disease.

May 8, 1862, the men struck their tents, and the major part of the regiment went into camp at Gosport Navy Yard, May 9th—a portion of the regiment being kept in Norfolk, one company at the Naval Hospital, and one at Craney Island. Went into camp at Suffolk, Va., May 17, 1862, remaining there until June 8–9th, when the regiment left under orders to report at the "White House," Pamunkey River. The location of the camp during these three weeks was a healthful one, and the regiment was in a sound condition. Next encamped at "Fair Oaks," June 12th. The site of encampment was the battle-field of a previous date. The country around was scattered with unburied human bodies and horses, in the several stages of decomposition, the water was impure, and the air pestilential. There was evident a scarcity of vegetable food while at Fair Oaks; and the labors of the regiment were very severe. Picket duties carried it every 3d day into the midst of an almost insupportable stench arising from decaying bodies and stagnant pools. Daily and nightly alarms called the men, when off duty, to arms. In addition to which, they were engaged in the armed reconnoissance of June 18th, which resulted in heavy loss to the regiment, and in the battles of June 25th and June 28th.

June 29th, the regiment was *en route*, and was engaged in the successive battles taking place during the retreat. Its loss at the battle of Glendale was heavy—at the battle of Malvern Hill, it was less severe. July 6th, went into permanent camp near Harrison's Landing. This camp was situated on the southern exposure of a side hill. There was an abundance of running water about it, and good bathing conveniences. The heat was intense during the stay of the regiment in this neighborhood; still, under the thorough camp policing pursued, the location could not be considered an unhealthy one. The great amount of sickness prevailing here was consequent to the residence at Fair Oaks, and the hardships encountered in the march thence and during the protracted battles which ensued. Exhausted and half starved, there were few in good health on the arrival at this post. About six weeks of rest, extra supplies of vegetables, and an abundance of clothing, with the very liberal supplies of lemons and other comforts from the Purveying Department, restored most of the men to a good state of health, before the camp was broken up, on the retiring of the Army of the Potomac from the Peninsula.

August 15th, the regiment was in line of march, and, August 23d, having taken boat at Yorktown, arrived at Alexandria. Having remained two days in camp near this last mentioned city, it was removed to Warrenton Junction, whence, after a stop of twenty-four hours, the regiment was on the return August 27th. It was engaged in the battle of "Kettle Run," on the last mentioned day, in the battles of Manassas August 29th and August 30th, and of Chantilly September 1st. In the hurried departure from Warrenton Junction, all property, public and private, including that pertaining to the hospital (one wagon alone miscellaneously collected being excepted), was either destroyed on the spot, or afterwards burned in a railroad car,

to prevent its falling into the hands of the enemy. On this return march, the officers were without horses, and the men had left camp with a scarcity of rations; hence, in addition to the suffering resulting from the protracted fighting, those of the march alone were extreme. *There was not an ambulance in the whole division*, and it was necessary to leave many sick and broken down men by the wayside, to appeal to the charities of other divisions more fortunate, or to slowly drag themselves along. The inconveniences resulting from this deficiency, during the battles of Manassas, were distressing, for any ambulance accommodation was entirely hap-hazard.

September 3d, went into camp near Fort Lyon, and removed to its present location near Fort North on the sixth inst. This encampment has an elevated situation, is thoroughly drained, and the wells in the vicinity contain excellent water. The men are well fed, and are gradually being supplied with the necessary clothing. Sibley tents have just been received for the whole regiment. The number present for duty, this September 30th, is 17 officers and 533 enlisted men. There has been a large amount of diarrhœa and jaundice prevailing in the regiment since its return to Alexandria, very few having escaped; but the sanitary condition is steadily improving.

The history of the regiment comprises no epidemics other than a slight one of rubeola, and one of parotitis, while it was living in Camp Hamilton. But little treatment was employed for these diseases.

Subjoined is the statement, in compliance with the requirements of Art. 4, Circular No. 9.

Original strength of the regiment,	1033
Number of recruits who have since joined,	69
Number of deaths from wounds,	44
" " " " disease,	21
discharged from service for disability,	55

The strength of the regiment June 30, 1862, was as follows:—

For duty,	730
On sick report,	88
In General Hospital,	98
Other absentees (none on furlough),	23
Total,	939

On June 30th, the regiment was engaged in battle. The earliest entry on the regimental books was July 10th, which latter date has been made use of for the above table.

Respectfully submitted,

C. C. Jewett,
Surgeon of 16th Mass. Vols.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, OCTOBER 16, 1862.

Ambulance System for the United States Army.—We have devoted considerable space in recent numbers of the Journal to this important subject, and we do not propose to let it drop until it is evi-

dent there is no further need of agitating it. At the present time, we know of nothing connected with the management of the army which more urgently demands thorough, efficient and radical reform. The utter insufficiency and cruelty of the present apology for a system has been fully exposed in our pages by Dr. Bowditch, and the members of the medical profession here are already at work to bring their influence to bear upon the Government, to effect the needed changes. This work must not be remitted. It is too common an experience for those who have become impressed with the existence of some mighty evil, to rest content with relieving their minds upon the subject through the press, leaving to others to do what properly falls within the line of their own duty. As for the gentleman who first enlightened us here upon this matter, it needs no assurance from us to those who know him, that he will not leave one stone unturned, so far as his individual efforts are concerned. But what can one man do, where so much is to be effected? The *vis inertiæ* to be overcome in dealing with army arrangements on so gigantic a scale as our own, where any important reform is contemplated, is an obstacle requiring Herculean strength to remove it. Dr. Bowditch should receive the sustained, continuous assistance of the whole medical profession, until a complete reformation is effected. No class of men have a stronger hold on the community for bringing about measures of practical benevolence than they have; and through their influence a public opinion may, nay must be created, which will be irresistible. Let the military authorities be besieged and overwhelmed with petitions, if need be; let them have no rest until they yield to the imperative demands of an outraged people.

As we write, we see the announcement in the public press that a movement is on foot, under the direction of a Mr. Pierce, for organizing a body of 12,000 men, as an ambulance corps. We know not under whose authority this step is taken, and we shall be truly rejoiced to learn that it has the sanction of government: otherwise it will be likely to meet the fate of the various relief corps, heretofore raised by individual effort, only to be informed that their services were not wanted. It has been said that the opposition hitherto made to a distinct ambulance organization rests with General Halleck and Mr. Stanton. It is difficult to believe that these gentlemen blindly oppose what every other reasonable man says is simply humane and just. We cannot but think that they may have some plan of their own which they have not as yet made public. General Halleck, as every one knows, when commanding in the West, was particularly courteous and efficient in his assistance to the Sanitary Commission in their humane efforts to lessen the sufferings of the sick and wounded, and we cannot believe the Secretary of War has a harder heart than an old soldier. Let public sentiment, then, be kept alive and active on this subject, until it bears down all opposition, and we can feel assured that everything is done that can be done to assuage the inevitable miseries which this wretched rebellion has brought upon us.

Nitrate of Potassa as a Remedy for Intermittent Fever.—The following communication has peculiar interest at the present time. Its statements are so extraordinary as to be almost incredible. Their truth or error admits of such ready proof that we hope soon to hear of conclusive experiments on some of the multitude of cases of intermittent coming under the notice of our army surgeons. It is worthy

of remark that the combinations of potass have a remarkable power of penetrating the tissues and of producing the most unmistakable alterative effect: no medicines in the whole pharmacopœia have more decidedly the character of specifics than the iodide, the chloride and the arsenite of this mineral. The communication of our correspondent recals to our mind the fact, that several years since we used the iodide of potass successfully in the treatment of a case of fever and ague that had resisted the power of quinine. We sincerely hope that the confidence of our correspondent in the efficacy of the nitrate may be most fully confirmed by the experience of others. Should this be the case, intermittent fever ought to be the last disease from which our soldiers should suffer, for each man has the remedy in his own cartridge box. Query: has the mixture of gun-powder and whiskey in the canteens of the Confederates anything to do with such a supposed medicinal effect?

Mr. Editor.—℞. Potassæ nitrat., gr. x.: sp. vini gallici vel. aquæ ʒss. M. Take immediately.

The above prescription I have used with great success in the cure of intermittent fever, even where quinine has failed. In my opinion no preparation is equal to it; for it possesses antiperiodic properties completely, and may be administered when the stomach would not tolerate quinine. I deem it a specific in ague; for I have never failed to arrest the paroxysm, if uncomplicated. You will also find the patients are less liable to relapse than in those cases cured by quinine. In the cold stage, if administered in a full dose, and the patient be placed in bed and covered with blankets, he will in a few minutes experience considerable heat, which will be followed by copious perspiration, and every unpleasant feeling will vanish. When it is more agreeable, the powder may be placed on the tongue and permitted slowly to dissolve.

I shall not attempt to explain the action of this medicine on the system in the cure of ague, but will leave that to older heads than mine to determine; still, we do know that after it is taken into the stomach and becomes absorbed, it has the chemical effect of changing the dark-colored venous blood to arterial, or at least it changes its color. It also acts on the kidneys as a stimulant, producing diuresis, as well as diaphoresis; and in this manner may rid the system of the poison that causes the ague, provided that poison is produced "by the retention of materials destined for excretion." This medicine, in its operation, more closely resembles nature's mode of curing this same disease, than any other: as she cures by copious diaphoresis as well as diuresis, or in other words by elimination.

I contend that this remedy possesses advantages over any other now in use: especially for its antiperiodic properties, which it possesses *perfectly*. The patients are less liable to relapse than in those cases cured by quinine, and its administration is more agreeable to the patient. And last, but not least, it is much less expensive.

Hillsboro', Ill., Sept. 13th, 1862. Amos Sawyer.

We print the following communication for the benefit of those, if there be such, to whom paste-boards splints are a novelty. They have been in common use here for some years; but of late, splints made of gutta percha have superseded them to a great extent. This substance is so much more plastic than paste-board, as to be much

more easily adapted to those cases suitable for its use. In the choice of apparatus, however, we are inclined to think that generally it is very much a matter of fancy or convenience with the surgeon, the same result being attained, in different hands, by quite various appliances.

Paste-board Splints. *Mr. Editor,*—I cannot tell whether the use of these splints originated with myself or not; but this is a matter of no consequence. Suffice it to say that I have been in the habit of using them almost ever since the beginning of my practice, now upwards of thirty years. My sole object in calling attention to them is to make them more generally known, especially to our younger surgeons, as the simplest, often the most accessible, and the lightest and the easiest surgical splint I have seen employed. The old wooden splint I have entirely discarded.

Called, for instance, to a case of broken arm, finger, or leg, I cut a bit of paste-board into strips of suitable lengths and width, and soak these in water till thoroughly wet. I then fit them to the adjusted limb, and immediately apply the bandage. This is left on from twelve to thirty-six or more hours, according to circumstances, when I cautiously remove it, and give the limb an airing. The splints are now found to be dry, and completely moulded to the shape of the limb, needing no pads, cotton or flax to fill up vacancies. The arched form which the splints have now acquired, gives them a surprising degree of firmness: and they can be easily adapted from this time onward, to the broken limb, which rests comfortably in them, as in moulds of clay, exactly adapted to the surface of the limb. These splints are so light as not to be at all cumbersome to the patient, and require little skill in their adaptation to the limb. I use different thicknesses of paste-board, according to the size of the part treated; and have been able to see no reason why the paste-board splint should not meet with universal approbation. Jno. T. Plummer.

Inspection of Hospitals. *Mr. Editor,*—Everything pertaining to hospitals is now exciting much attention. The inspection of hospitals of the army, undertaken by the Sanitary Commission, is an admirable conception, and I doubt not will be productive of satisfactory results. Having given much attention to the subject in general, and thinking, sometime since, that it was desirable we should have more particular information about certain hospitals, so as to make a more correct estimate of the causes of the greater mortality in one than in another, and to arrive at the most truly economic way of building and managing hospitals, I drew up a formula, or list of memoranda, comprising those things which I thought worthy and desirable of notice in describing any particular one. I here offer this to you for publication. As you see, it is made to embrace every department—topographical, constructional, &c., down to the economic and pecuniary. I do not suppose it is perfect, and should therefore like to have any suggestions of points that I have omitted.

TOPOGRAPHY.

Elevation—Relative to water surfaces; relative to surrounding country.
Character of surrounding country; of soil.
Proximity to Water—Sea, lake, or river; fresh or salt; tidal?—if so, surface laid bare at ebb—gravel or mud.

Amount of foliage or herbage in the neighborhood.
Any factories; tanneries; slaughter-houses; gas, chemical, or kerosene works?
What grounds are around the building for the use of the patients?

METEOROLOGICAL POINTS.

Temperature—Minimum; maximum; mean.
Hygrometry—Dry or moist.
Prevailing Winds—Cold or warm; dry or moist.
Is the building sheltered from them? By what? high land, foliage or houses?

CONSTRUCTION OF BUILDING.

General Shape and Arrangement—Square; oblong; hollow square; pavilion (how arranged).
Size; material; thickness of walls (solid or hollow); number of stories; cellarage; out-houses.
General Internal Plan—How divided; size of wards—height.
Do the wards run all across the building, so as to have sunlight on each side and through ventilation?
Interior Finish—Wood, bare or painted.
Plaster—smooth or rough finish, bare or painted; on the wall itself or on furring.
Floors—hard or soft wood, bare, painted, or covered.
How is the building heated?—Lighted (artificial light)?—Ventilated?—Drained?
Privies and Water Closets—On what plan? Where placed? Bedside conveniences for patients.
Supply of Water—Kind (limestone, river, well, &c.); hard; soft.
Number of Beds; material and kind of cot; material of mattrass.
Anything else of notice about beds or their arrangement; number of cubic feet to each.
Number of admissions; of beds on average full; of deaths; of discharges—relieved, cured.
Average stay of patient.
Any endemics; any epidemics.
Food—Kind; quantity (sufficient and obtained in good condition); how cooked.

FOUNDATION AND MEANS OF SUPPORT OF THE HOSPITAL.

Endowed—By government; by private individuals; supported by subscription; by receipts from patients.

GOVERNMENT.

Governor or Trustees—How appointed.
Professional Force—Physicians; Surgeons; paid or unpaid. Steward; matron.
Nurses—male; female.
Laundresses; cooks and other helps.

EXPENDITURES.

Original Cost of Hospital—Ground; building; fittings.
Annual Cost—Physician and Surgeon. Steward and matron. Nurses and other helps.
Food; medicine; fuel; light; other expenses.
Cost of each patient per week—For food; for medicine.
Whole average cost of patient.

It is also desirable, if possible, that a ground plat of the house, grounds and surroundings, within a radius of an eighth of a mile, should be given. As a general thing, this can be done with little trouble, and sufficiently accurate for all useful purposes, after a little practice. The eye can measure distances nearly enough, or they can be paced off. It must not be forgotton to designate on this plat, the cardinal points—an important item, often omitted.

4 *Staniford St., Oct. 10th,* 1862. WM. ED. COALE, M.D.

Suum Cuique Tribuito.—*The Cincinnati Medical and Surgical News.*—We are always gratified to see articles from the Journal copied into other medical publications, thus endorsing the value of such articles. Two late numbers of the *Cincinnati Medical and Surgical News* each contain an article from our pages, copied *in extenso*. We regret to observe, however, that in neither instance is any credit given to us, and the position of the articles would lead to the inference that they are original contributions to that respectable Monthly. Should the News see fit to publish the concluding portion of Dr. Welsh's interesting translation of Saurel's valuable article on Operations after an Engagement, which appeared in the Journal several weeks since, and of which it printed the first part without giving us credit, we hope to see a due recognition of the source from which it is obtained. *Suum cuique* is a principle which cannot be too jealously observed in all the relations of the medical profession.

The American Dental Convention.—The eight annual meeting of this Convention was held at Trenton Falls, N. Y., commencing on the 5th of August, and continuing four days. It was largely attended, and its proceedings were animated and of an interesting character. The retiring President, Dr. John Allen, read an address on *the best means of advancing dental science*. Dr. Amos Westcott was chosen President for the coming year, and made some appropriate remarks. A lengthy discussion took place on the use and relative value of anæsthetics. Dr. Rogers stated that he had given chloroform in more than 2000 cases, and had been extremely successful, two cases only of slight disturbance of the health following its use. Dr. Colburn preferred sulphuric ether, which he had given on an average once a day for the past sixteen years; he had formerly used chloroform, but relinquished it for fear of the consequences. Dr. Kingsley stated that in the New York Hospital, ether only was given, and that among conscientious physicians and surgeons chloroform was not used. Dr. Dwinelle gave both ether and chloroform, but usually the latter. Had administered them in about 1100 cases, without injurious effects. He had found that the last thought of the patient previous to anæsthesia was the ruling thought through the condition. He never gave anæsthetics unless absolutely necessary. Dr. Hayes had been in the habit of applying chloroform locally in the extraction of teeth. He first lanced the gums, and then applied it on a wad of cotton. When the pain of the application ceased, he extracted the tooth, and was satisfied that the pain was thus greatly lessened. Dr. Ellis did not like to administer either of the agents. Had used chloroform, until he met with unpleasant results, and then he substituted ether. Thought dentists should discourage the use of both. Dr. Foster was in the habit of using a mixture of both, very cautiously. Dr. Roberts preferred chloroform. Dr. Perkins opposed the use of chloroform as unsafe. Latterly is in the habit of throwing the responsibility on the patient or family physician. Dr. Bogue conceived there was no danger from chloroform, but the time and trouble required prevented his using it. Dr. Perkins, of Milwaukie, considered chloroform the great benefactor of the nineteenth century. Dr. Franklin thought that ether could be used without the possibility of endangering life, and therefore preferred it to chloroform. Dr. Palmer was opposed to the use of any anæsthetic. Dr. Tefft advocated the use of chloroform as a local

agent. Dr. Atkinson would give ether in difficult cases, and in case of trouble use chloroform in connection with it. Dr. Kingsley gave a case where ether was used with a glass inhaler; dilatation of the pupil, stertorous breathing and intense action of the heart followed. Two physicians were called, and all the known remedies for congestion of the brain used. The patient never entirely recovered. The patient had eaten nothing for twenty-four hours, and hardly anything for a week. Attributed the result to this circumstance. Since then, Dr. K. had given chloroform instead of ether when anæsthesia was required. Dr. Searle alluded to the extensive use of chloroform in the army, without ill effects; and under proper circumstances he would give it without the slightest hesitation. Sometimes gave it from a phial through the nostrils. The President preferred chloroform to ether, but thought it better for the dentist to get along without anæsthetics. Dr. Burras applied chloroform locally, but not by inhalation. Dr. Hurd would never under any circumstances use chloroform in his office by inhalation, but sometimes by local application. Dr. Goldey mentioned a death from the use of chloroform. Had used it to some extent, but observing considerable nervousness to follow its use, had abandoned it.

The *treatment* of *diseased pulp* also formed a subject of discussion by the Convention; as well as the general one of mechanical dentistry, including the use of rubber as a base for artificial teeth.

On the evening of the last day of the session, an enthusiastic meeting was held for the purpose of expressing the sense of the dental profession, through its representatives, "on the question of the rebellion now existing in this country, and to assure the government and the country of the allegiance of this profession to the Union." Thirteen States were represented at the meeting. Patriotic speeches were made by several of the members, by Judge Kirtland, of New York, and by Rev. Mr. Harvey, Chaplain of the 62d N. Y. Regiment, and spirited resolutions were adopted.

Opium Poisoning treated by Belladonna.—Dr. W. F. Norris, of Philadelphia, in the *American Journal of the Medical Sciences*, reports two cases of opium poisoning treated by large doses of belladonna. In the first case, as near as could be estimated, seventy-five grains of sulphate of morphia were swallowed. In the course of five or six hours, fifty grains of the extract of belladonna were given, and other remedies were also employed. On the second day the patient had recovered. The other case terminated fatally—the contents of an ounce phial of laudanum having been taken, after a previous attempt at suicide by means of stabbing. A smaller quantity of belladonna than in the first case was administered, it being impossible to make the patient swallow the five-grain dose last attempted. Dr. Norris also gives, in a tabular form, a list of nine cases of poisoning by opium treated by belladonna, selected from the journals, all but one of which were successful; a list of fourteen cases of belladonna poisoning treated by opium, thirteen of which were successful; and four of atropia poisoning treated by opium, in each of which the patient recovered From his concluding observations, we copy the following:—

"The foregoing cases seem conclusively to show that in opium poisoning, belladonna in doses which in a state of health would cer-

tainly poison, may be administered with impunity and be followed by a rapid subsidence of the symptoms produced by the exhibition of the former drug, and *vice versa* that opium rapidly and safely counteracts the poisonous influence of belladonna. The treatment above indicated has, indeed, in some cases failed, and this may prove that they are not mutually specifics; but even in these fatal cases (which are few) we may sometimes see a partial amelioration of the symptoms, and it is well worthy of inquiry how much in these instances the relative quantities of the two drugs administered, the stage of poisoning in which the patient was first seen, the age and constitution, may have contributed to the result."

A case is related in the *Buffalo Medical and Surgical Journal*, in which a piece of glass, one inch long by about half an inch wide at the base and terminating in a sharp point, was removed from the foot of a lady after having been there for fifteen years. The glass was stepped upon, several pieces entering about the head of the metatarsal bone of the great toe, and all but this one were removed at the time. It had passed across the sole, and was extracted about an inch back of the head of the metatarsal bone of the little toe—having caused but little inconvenience to the patient.

Medical Department of the West.—The following officers have been announced as Medical Directors of the Armies and Departments within the jurisdiction of the Assistant Surgeon-General, Col. R. C. Wood, U.S.A., Chief of the Medical Department of the West: Surgeon W. J. Sloan, U.S.A., Department of the North-West; Surgeon Madison Mills, U.S.A., Department of Missouri; Surgeon B. J. D. Irwin, U.S.A., Army of the South-West; Surg. L. H. Holden, U.S.A., Army of the Ohio; Surg. Robert Murray, U.S.A., Army of the Ohio; Surg. H. R. Wirtz, U.S.A., Army of the Tennessee.—*Am. Med. Times.*

Anæsthesia from a Mixture of Carbonic Acid and Atmospheric Air.—Dr. Ozanam, in an important article, speaks of the anæsthetic properties of carbonic acid mixed with air. It is well known that carbonic acid produces asphyxia when inhaled in a state of purity; Dr. Ozanam, by mixing three parts of it with one part of atmospheric air, renders it innocuous. He describes his manner of applying it in the following case. Having to open a large tumor requiring incision to the depth of several inches, he complied with the request of his patient, a young man, who asked to be rendered insensible. The mixture above stated was accordingly introduced into an India-rubber bag capable of containing about 5 1-4 gallons; a long flexible tube, communicating with the bag by a stop-cock, and terminating in an opening applicable to the mouth and nostrils, was then adapted to the patient's face, but so as to allow of his inhaling atmospheric air along with the mixture. The stop-cock was then opened, the bag compressed, and the inhalation commenced. Anæsthesia was produced at the end of about two minutes, and during this time two remarkable phenomena were observed, viz., an acceleration of the action of breathing, and an abundant perspiration on the face. The surgical operation was performed without the slightest indication of pain on the part of the patient; the insensibility was therefore complete. Dr. Ozanam caused the inhalation to cease, and it was only then he applied the bistoury for the last time. This cut was felt by the patient, but the pain was extremely moderate, and the return of sensibility took place without any difficulty.—*Paris Correspondence in British Am. Jour.*

The Hypophosphites of Lime and Soda.—About two years ago, Dr. Churchill, of Paris, advocated the use of the hypophosphites of lime and soda in

cases of incipient consumption, or at least of a tendency to that disease. His theory rests on the following principle:—that one of the essential conditions of phthisis consists in the want or undue waste of oxydizable phosphorus in the animal economy; and that, consequently, the disease may be prevented by administering a due amount of that element. Since then Dr. Churchill has been actively engaged in collecting facts in support of this certainly very plausible theory, and the results of his observations now form the subject of an interesting series of papers published in the *Medical Circular*, under the title, "The proximate cause of consumption and its specific treatment by the hypophosphites." Of the twenty-four cases hitherto described, there is not one but relates to consumption in the third stage successfully treated by the hypophosphites, a fact which goes far to establish the efficacy of the new remedies, and would perhaps acquire greater value, were some of the negative cases also described. A statistical comparison of the successful with the negative cases would, I think, be extremely valuable in determining to what extent the hypophosphites may be relied on in a disease in which so many remedies have hitherto failed.—*Ibid.*

West Philadelphia General Hospital.—A new Department has recently been organized in this model Military Hospital, for the treatment of diseases of the eye, and placed under the care of Dr. Ezra Dyer as its surgeon. This hospital appears to be a favorite institution of Surgeon General Hammond, who draughted the plans, had a supervision of its construction, and personally selected its corps of surgeons.

Government, it is understood, is to rent the hospital grounds at New Haven, Ct., and erect buildings to accommodate one thousand patients. The hospital will be organized on a strictly military basis. Dr. P. A. Jewett has been appointed a surgeon in the United States Army, and the hospital will be under his charge, with a sufficient number of assistant surgeons. Two hundred and fifty wounded soldiers are expected to arrive in New Haven in a few days.—*Courant.*

VITAL STATISTICS OF BOSTON.

For the Week ending Saturday, October 11th, 1862.

DEATHS.

	Males.	*Females*	*Total.*
Deaths during the week,	48	38	86
Average Mortality of the corresponding weeks of the ten years, 1851–1861,	41.5	39.2	80.7
Average corrected to increased population,	..	..	89.
Deaths of persons above 90,	..	0	0

Mortality from Prevailing Diseases.

Phthisis.	Chol. Inf.	Croup.	Scar. Fev.	Pneumonia.	Variola.	Dysentery.	Typ. Fev.	Diphtheria.
9	10	1	2	1	0	4	5	2

Errata.—On page 214, in a part of this week's issue, the words "mutanter" and "mutamer" should have been printed *mutantur* and *mutamur*.

Died,—In San Francisco, Cal., Dr. E. S. Cooper, Prof. of Anatomy and Surgery in the Medical Department of the University of the Pacific, and Editor of the San Francisco "Medical Press."

Communications Received.—Case of Gun-shot Wound of the Head.—A common Cause of Baldness.

Pamphlets Received.—The Sanitary Condition of the Army of the United States. By Edward Jarvis, M.D. (From the Atlantic Monthly for October.)—Eleventh Annual Report of the Boston Provident Association.—Employment for Patients in the British Lunatic Asylums. By Edward Jarvis, M.D., Dorchester, Mass.

Deaths in Boston for the week ending Saturday noon, October 11th, 86. Males, 48—Females, 38. Accident, 3—apoplexy, 4—congestion of the brain, 2—disease of the brain, 4—bronchitis, 1—burns, 1—cancer, 1—cholera infantum, 10—consumption, 9—convulsions, 2—croup, 1—debility, 3—diarrhœa, 4—diphtheria, 2—dropsy of the brain, 5—drowned, 1—dysentery, 4—epilepsy, 1—scarlet fever, 2—typhoid fever, 5—gangrene (of the leg), 1—disease of the heart, 3—infantile disease, 1—insanity, 1—intemperance, 2—congestion of the lungs, 3—inflammation of the lungs, 1—marasmus, 2—old age, 1—paralysis, 1—scrofula, 1—unknown, 4.

Under 5 years of age, 39—between 5 and 20 years, 7—between 20 and 40 years, 9—between 40 and 60 years, 16—above 60 years, 15. Born in the United States, 65—Ireland, 16—other places, 5.